

**REMARKS**

The present amendment is in response to the Office Action mailed June 22, 2005, in which Claims 1-14, 23, 27 and 28 are rejected and Claims 15-22 and 24-26 are withdrawn from consideration. Applicant has thoroughly reviewed the outstanding Office Action including the Examiner's remarks and the references cited therein. The following remarks are believed to be fully responsive to the Office Action and, when coupled with the above amendments, are believed to render the claims at issue patentable.

Claims 1, 5, 12 and 14 are amended to particularly point out the features of the present application, and Claim 29 is newly added. Applicant respectfully submits that no new matter has been added and that the originally filed specification, drawings, and claims support the amendments.

**Claim Rejections Under 35 U.S.C. § 112**

According to Paragraphs 4-5 of the Office Action, Claims 12-14 and 23 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particular point out and distinctly claim the subject matter which applicant regards as the invention. The term "optionally" in Claim 12 is not clear if the shaft is definitely claimed to protrude from the bottom planar surface of the fan base or not.

In response thereto, Claim 12 is amended to cancel the words from the term "optionally", and Claim 29 depending from Claim 12 is newly added to particular point out the shaft has another end protruding from the bottom planar surface of the fan base.

**Claim Rejections Under 35 U.S.C. § 102**

According to Paragraphs 6-9 of the Office Action, Claims 5-11 and 28 were rejected under 35 U.S.C. 102(b) as being anticipated by Schmider et al. (U.S. Patent 5,176,509), Claims 12, 14 and 23 were rejected under 35 U.S.C. 102(b) as being anticipated by Muller et al. (U.S. Patent 4,164,690), and Claim 12 was rejected under 35 U.S.C. 102(b) as being anticipated by Papst et al. (U.S. Patent 3,777,191) and Taniguchi et al. (U.S. Patent 6,137,197).

Applicant respectfully traverses these rejections. With respect to Claim 5, Schmider et al. (U.S. Patent 5,176,509) discloses a flat portable fan but the shaft thereof does not protrude outwardly from the bottom surface of the fan base. However, the shaft and the bearing assembly of the present application both protrude outwardly from the bottom surface of the fan base to further enlarge the contact area for connecting the hub to the shaft.

Accordingly, the fan motor structure of the present application and that of the cited reference are different. Claim 5 can not be anticipated by Schmider et al.

With respect to Claim 12, Muller et al. (US 4,164,690) discloses a compact miniature fan and at the upper end of 37 there is secured a bushing 57 for securing a deep-drawn hat-shaped molded piece 58. However, the bushing 57 is larger than the bearing diameter so as to increase the dimension of the compact miniature fan.

Referring to FIG. 7 of the present application, the outside diameter of the sleeve 24 is smaller than the outside diameter of the bearing so that a part of the sleeve can be inserted in the bearing assembly to avoid increasing the dimension thereof. Accordingly, Claim 12 can not be anticipated by Muller et al.

In addition, Papst (US 3,777,191) and Taniguchi (US 6,137,197) respectively disclose a bushing 41 and boss 12. However, both the bushing 41 of Papst and the boss 12 of Taniguchi are larger than the outside diameter of the bearing. The dimensions thereof are therefore increased. Accordingly, Claim 12 can not be anticipated by Papst and Taniguchi.

Accordingly, the fan motor structure of the present application and that of the cited references are different. Claims 5 and 12 cannot be anticipated by Schmider et al., Muller et al., Papst, and Taniguchi.

Hence, Applicant respectfully submits that the amended independent claims 5 and 12 are allowable over the prior art of record. In addition, Claims 6-11 and 28, depending on Claim 5, and Claims 13-14 and 29, depending on Claim 12, are also allowable over the cited references.

#### **Claim Rejection - 35 U.S.C. § 103**

According to Paragraphs 10-13 of the Office Action, Claim 1-4 and 27 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Hishida et al. (U.S. Patent 5,160,866) in view of Muller (RE. 34,268); Claim 13 was rejected under 35 U.S.C. § 103 (a) as being unpatentable over Muller et al. in view of Huang et al. (U.S. Patent 6,509,666).

Applicant respectfully traverses this rejection. The fan motor structure of the present application and that of the cited references are different. Regarding Claim 1, Hishida et al. in view of Muller fails to teach or suggest a shaft having one end "protruding from top planar surface of the fan hub". In fact, Hishida et al. discloses a hub 222 having a top planer surface with a through hole for a shaft 204 passing through, so the shaft 204 does not protrude from the top planer surface of the hub. In addition, Hishida et al. does not disclose a groove formed on the shaft to be securely fixed on the hub.

Thus, even though Muller shows a motor rotating a fan impeller, the combination of Hishida et al. and Muller still cannot disclose the present invention as in Claim 1. Accordingly, Applicant respectfully submits that amended Claim 1 is allowable over the art of record. In addition, Claims 2-4 and 27, depending on Claim 1, are also allowable over the cited references. Applicant respectfully requests that the 35 U.S.C. § 103 (a) rejections of Claims 1-4 and 27 be withdrawn. In addition, regarding Claim 13, since Muller et al. fails to teach or suggest adopting a sleeve whose outside diameter is smaller than that of the bearing, Claim 13 is not obvious over Muller et al. in view of Huang. Reconsideration and withdrawal of this rejection is respectfully requested.

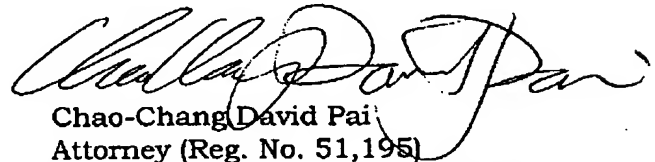
### CONCLUSION

In light of the above amendments and remarks, Applicant respectfully submits that all pending claims as currently presented are in condition for allowance and hereby respectfully requests the Examiner to reconsider and withdraw the rejections and pass the case to issue at the

earliest convenience.

Applicant has thoroughly reviewed the art cited but not relied upon by the Examiner. Applicant has concluded that these references do not affect the patentability of the claims as currently presented.

Respectfully submitted,



Chao-Chang David Pai  
Attorney (Reg. No. 51,195)  
Pai Patent & Trademark Law Firm  
1001 4th Avenue, Suite 3200  
Seattle, WA 98154  
(Tel) 206-372-3162